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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/665,367 | 09/19/2000 | Dan Kikinis | 004688.P015 | 5059 |
| 7590 | 10/22/2003 | | EXAMINER | |
| John P Ward Blakely Sokoloff Taylor & Zafman LLP Seventh Floor 12400 Wilshire Boulevard Los Angeles, CA 90025-1026 | | | NGUYEN, CAO H | |
| | | | ART UNIT | PAPER NUMBER |
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Please find below and/or attached an Office communication concerning this application or proceeding.

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|------------------------------|--------------------------------------|--------------|---|
| Office Action Summary | Application No. 09/665,367 | Applicant(s) | Ward Examiner Cao (Kevin) Nguyen |
| | Art Unit 2173 | | |



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on Jul 28, 2003
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.
- Disposition of Claims**
- 4) Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-48 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some* c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
- 4) Interview Summary (PTO-413) Paper No(s). _____
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____

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DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-6, 8, 10, 13-18, 20, 22, 30, 32, 34, 37-42, 44 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Matthews, III et al. (US Patent No. 5,724,492).

Regarding claims 1, 13, 25 and 27 Mathew discloses a method for displaying an Electronic Programming Guide (EPG) comprising generating a three dimensional virtual mesh polyhedron (see Abstract); polyhedron having a first object on a first plane and a second object on a second plane, objects providing interactive surfaces (see figure 7); but Mathew fails to explicitly teach generating a plurality of planes positioned in polyhedron, planes being approximately parallel.

However, Mathew's three-dimensional object is animated to show the spinning of the menu structure and the relationship between the menu panel. It would have therefore been obvious to one of an ordinary skill in the art at the time the invention was made to provide generating a plurality of planes positioned in polyhedron, planes being approximately parallel as

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taught by Matthew in order to provide a methods for displaying multi-paneled menu objects in 3-D world.

Per claims 2, 14, 26, and 38, Matthew discloses wherein said polyhedron is displayed with an isometric view [rotating the object includes displaying graphic elements depicting a 3-D relationship between the first and second panels.. see col. 4, lines 34-38:] discloses a method for displaying a channel manager or an Electronic programming guide (see fig. 7); and the method includes displaying a multi-sided or three dimensional plane surfaces ("virtual mesh polyhedron") (see fig. 7); wherein each plane surface includes objects positioned on the 3D surfaces, such as NBC object positioned on one side of the 3D surface ("first object on a first plane") and a volume object positioned on another side of the 3D surface ("second object on a second plane") (see Fig. 7) and said objects provide interactive surfaces selected by a viewer (see Fig. 7, col 19, lines 51-62).

Per claims 3, 15, 27, and 39, Matthew discloses wherein said EPG is generated exclusive of three dimensional graphics circuitry [a transition between panels on the channel manager.. see col. 13, lines 40-43 and figure 7]; and the channel manager could be displayed as a three dimensional object shown in perspective or orthogonal view ("isometric view") (col 15, lines 15-35).

Per claims 4, 16, 28, and 40, Matthew discloses wherein selection of one of said objects will select a program provided on a certain channel at a certain time [The channel manager of Matthews provides a user interface that facilitates the browsing and selection of an items such as

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channels from a group of multiple items, associated with certain time (col 5, lines 52-col 6, lines 4, col 2, lines 18-39); and discloses a high end "PENTIUM" microprocessor that supports a graphics-intensive (such as 3D), graphics-based presentation of program-related information. The channel manager panels are presented as part of a three-dimensional structure (col 10, lines 40-59, col 12, lines 28-col 13, lines 2).

Per claims 5, 17, 29, and 41, Matthew discloses wherein said objects are independent of said polyhedron [the channel manager could be displayed as a 3-D object shown in perspective or orthogonal view... see col. 15, lines 2534 and figure 6.]; and the channel manager of Matthews provides a user interface that facilitates the browsing and selection of an items such as channels from a group of multiple items, associated with certain time (col 5, lines 52-col 6, lines 4, col 2, lines 18-39).

Per claims 6, 18, 30, and 42, Matthew discloses wherein said objects represent certain television program on a certain channel at a certain time [the set-top terminal contacts the headend system and requests the downloading of certain program modules.. see col. 11, lines 50-67]; and Matthews provides a method and system for selecting a visible control item independently of the three dimensional plane surfaces and for supplying the user with an indication of other control items that are available for selection by the user (col 5, lines 52-col 6, lines 4). Also describes the three-dimensional menu 1005 is a collection of panels. It is used to present unique menu lists on each panel (col 17, lines 63-col 18, lines 9).

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Per claims 8, 20, 32, and 44 Matthews discloses interactive system includes application for an electronic program guides and video on demand services, wherein certain television programs on a certain channels at a certain times are presented (col 14, lines 51-58).

Matthews' interactive system includes a multi-sided panels which are parallel (see Fig. 7).

Per claims 10, 22, 34, and 46, Matthew discloses the system of Matthews employs three-dimensional images or pictures and animation to display three-dimensional object (col. 20, lines 38-48).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 7, 9, 19, 21, 31, 33, 43, and 45 rejected under 35 U.S.C. 103(a) as being unpatentable over Matthews, 111 et al (5,724,492) and further in view of Nakano et al (6,043,818). While Matthews' interactive system includes a multi-sided panels ("virtual mesh polyhedron"), these multi-sided panels are not explicitly described as a cube. Furthermore "planes correspond to levels of preference." also not explicitly described. However, Nakano

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discloses interactive cubic display (claims 7, 19, 31, and 43), wherein users can activate any function in the cubic wall by clicking a button. Nakano further discloses a cubic planes arranged and displayed in four sides of a cube; wherein depending on user's preference each face of the cube can be selected to be shown or displayed in front, left, right or top of the cube (see figs.

17-21, col 15, lines 12-16, col 16, lines 3) (claims 9, 21, 33, and -15). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to incorporate the interactive cubic shape surface planes with a multi-sided panels of Matthews'.

Thus, Matthews' system will provide a viewer a preference setting of interactive objects on each cubic surface display.

9. Claims 11, 12, 23, 24, 35, 36, 47 and 48 rejected under 35 U.S.C. 103(a) as being unpatentable over Matthews, III et al (5,724,492) and Nakano et al (6,043,818) and further in view of Williams et al (5,977,964).

While Matthews and Nakano disclose an interactive cube ("virtual mesh polyhedron,") neither the cube having three axes nor the three axes of the cube correspond to time, channel, and user preference is shown. However, Williams discloses the shortcomings. Williams relates to the field of entertainment systems, wherein Williams provides a method for automatically configuring a system based on a user's monitored system interaction and preferred system access times. Fig. 9 shows a display of television schedule grid configurable option which can vary from user to user base on the user's preference. A user can select a particular portion of the grid by

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moving a cursor across the grid to a cell in the grid that contains the title of the program available during the displayed time period. The system also displays the channels in the grid in the order of most frequently watched (fig. 9, col 7, lines 31-col 8, lines 24). Thus the system of Williams discloses these axes corresponding to time, channel and user preference (see fig. 9) (claims 11, 12, 23, 24, 35, 36, 47 and 48).

10. Applicant's arguments filed 07/28/03 have been fully considered but they are not persuasive.

In response to applicant's argument on pages 9-10, last paragraph that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art.

In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); *In re Jones*, 958 F.2d 347, 21

USPQ2d 1941 (Fed. Cir. 1992). In this case, Matthew teaches EPG 3-D but he fails to generating a plurality of planes positioned in polyhedron, planes being approximately parallel. However, three-dimensional object is animated to show the spinning of the menu structure and the relationship between the menu panel. One skill in the art would have been obvious to provide generating a plurality of planes positioned in polyhedron, planes being approximately parallel as

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taught by Matthew in order to provide a methods for displaying multi-paneled menu objects in 3-D world.

On page 12 and 13 of the Remark, Applicant argues that the combination of Matthew and Nakano fail to teach “generating a plurality of planes positioned in polyhedron”. However, the limitations as claimed set forth to read on “an imaginary screen of a three-dimensional rectangular parallelepiped (cube) is imagined...” see Nakano col. 15, lines 11-50).

On page 13 and 14 of the Remark, Applicant argues that the combination of Matthew and Nakano fail to teach “a plurality of planes positioned on a polyhedron”. However, the limitations as claimed broadly read on “System controller also provides a television schedule grid which displays the current channel selections for a predetermined period of time (e.g., the next two hours, week, or several weeks). The current program-scheduling to be displayed is available from a programming database, as discussed in more detail below with reference to FIG. 9. The display of this television schedule grid is a configurable option which can vary from user to user based on the user's preference. In one embodiment, the television schedule grid displays only those channels which user profile database indicates the current user watches. Additionally, in one embodiment the ordering of the channels on the television schedule grid varies based on the user's preference. In this embodiment, user profile database maintains a record of the time a user spends watching each television channel. Then, when system controller receives a request to view the television schedule grid (e.g., via the user's remote control) it displays the channels in the grid in the order of most frequently watched to least frequently watched. In an alternate

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embodiment, the television schedule grid displays the channels in the grid based on the genre of programming available during the displayed time period. For example, channel 2 may be Joe User's favorite channel, but if channel 8 is airing a football game while channel 2 is airing a documentary on the history of knitting (not high on the list of Joe User's genre preferences), system controller will display channel 8 before channel 2. see Williams col. 7-8, lines 1-67.

Accordingly, the claimed invention as represented in the claims do not represent a patentable distinction over the art of record.

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- Conclusion**
3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
4. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however,

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will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

5. Responses to this action should be mailed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231. If applicant desires to fax a response, (703) 308-9051 may be used for formal communications or (703) 305-9724 for informal or draft communications.

Please label "PROPOSED" or "DRAFT" for informal facsimile communications. For after final responses, please label "AFTER FINAL" or "EXPEDITED PROCEDURE" on the document.

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA. Sixth Floor (Receptionist).

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cao (Kevin) Nguyen whose telephone number is (703) 305-3972. The examiner can normally be reached on Monday-Friday from 8:30 am to 6:00 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Cabeca, can be reached on (703) 308-3116. The fax number for this group is (703) 872-9306

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

CAO (KEVIN) NGUYEN
PRIMARY EXAMINER
October 17, 2003

